ST. BARTHOLOMEW'S

HOSPITAL JOURNAL

Vol. XLVII MARCH 1st, 1943. No. 2

INDEPENDENCE

In the past few years, during which destruction of men and their property has been unprecedented in human history, there has been much thought and discussion, in almost every branch of our social system, as to the merits of present methods, and the best ways of improving them all after this war. This has brought about a very timely overhaul of the foundations of human society, and has impressed upon us the necessity for applying certain principles to every single activity in human life.

We do not intend to deal with these principles for the present, but rather with the method of putting them into practice, as seen in the many talks, discussions, and articles on the improvement and reconstruction of the various activities of the country at large, and, indeed, throughout the world after the war. Naturally enough, there are many difficulties and even impossibilities in the schemes put forward, and it is often impossible to suggest suitable alternatives. But there does seem to be one particular point which is present in the majority of men's minds when considering improvements and reconstructions; that is their independence. There are so many people, thinking people, today who have brilliant ideas for the improvement of one particular organisation, for instance, to quote our case, medicine. Obviously, the doctor's is the most important opinion, where reconstruction of the medical system of the country is concerned, but it should be, by no means, the only opinion on this subject. The public at large must have their say in the matter; in other words, the doctor must not remain independent of the opinion of the layman, where reconstruction is concerned, because service of the layman must be his key word, and that service will never be perfect until the man is consulted. This applies to every single other branch of the country's life, and, in an even bigger way, to the attitude of the nation towards other nations.

Let us start with the individual who makes up this world, and upon whom the future of the world ultimately depends. If he remains aloof and isolated from the interests of his neighbours across the road, he will lose all hope of ever bringing about any real improvement into his own life or his neighbours'. Let them co-operate and share their problems, consider the interests of the other, then there is real hope for improvement. So many of us are (if we were honest with ourselves) only truly concerned with our own well-being, only concerned with earning sufficient for our own family's comfort, and with achieving our personal ambitions, that we give little heed to the problems of others. We may be able to help these others very considerably. At least we shall have tried to make their lives easier, and will have shown some interest in their own affairs; we are all ready to receive sympathy from our friends, but do we offer this to them sufficiently?

Surely true happiness and peace of mind are only to be found in living fully for the interests and well-being of others, whether it be few or many. So much for the individual, yet the same holds true of professions and businesses.

If each profession was to consider not only its own particular contribution to the human race, but also the problems and difficulties of other professions, other concerns, reconstruction might proceed more easily, and would be achieved more completely, because by bringing the principles of the individual, such as true unselfishness, into the realm of business and profession, we are putting into practice what we preach to each other in private. So let the doctor consider the problems of industry, and of town-planning, and even of the Church.

Something is being done in this direction already, but not whole-heartedly enough. We are not really going completely to the root of the matter, and putting aside our own interests for those of humanity at large. As doctors, let us be concerned with improving the health of the nation and with stamping out disease, and never allow any so-called improvements to take place which do not maintain the highest possible consideration for the health of each man and woman. Therefore we must be interested in almost every conceivable department of life, and intrude therein, and persist untiringly in our efforts to protect the health of the individual, and prevent the interest of industry or other professions from ignoring the facts of health and how it may be maintained first. We will only put these ideas into practice if we share our knowledge with these other departments, and try and give what we can to their particular ideas for improvement. This spirit of dependence on other concerns must pervade all through our new system of life so that the whole state will work smoothly and efficiently for the service of its individual men and women.

Lastly, the principle applies to nations. We believe that the future of the world depends upon each nation living not merely for its own benefit, but for the benefit of mankind as a whole. There must be co-operation between every people, and all looking for the best means of contributing to the welfare of all men, so that each country is a link in the whole scheme, and no one people is independent of the others. The leaders of this country and our Allies are doing their best to put these ideas into practice. We hope that we, as individuals, may do the same amongst our neighbours.

LONDON NEWS

Professor J. Paterson Ross will be the candidate from St. Bartholomew's at the forthcoming election to the Council of the Royal College of Surgeons. He has been the Director of the Surgical Professorial Unit at Bart.'s since 1935, when he succeeded Professor Gask. He is at present Vice-President of our Medical College and senior examiner in Surgery for the University of London.

The only member of the Staff at present on the Council of the College of Surgeons is Sir Girling Ball, and it is most important to have another member on the Council to preserve continuity, and we sincerely hope that Professor Ross will be elected.

* * *

Dr. Geoffrey Evans has recently been elected Member of the Council of the Royal College of Physicians.

Professor Christie will be the Goulstonion Lecturer to the Royal College of Physicians this year on March 4th, 9th and 11th.

* * *

Dr. Geoffrey Evans will be the Lumleian Lecturer to the Royal College of Physicians this year on March 16th and 18th.

* * *

The next meeting of the Abernethian Society will be at 5.30 p.m. on March 18th, when Professor E. D. Adrian, O.M., will lecture to the Society on "The Electroencephalogram."

* * *

The Manager of the JOURNAL acknowledges with gratitude and deep feeling the receipt of one Valentine card from an anonymous contributor.

*THE REVIVAL OF ANTISEPSIS

By LAWRENCE P. GARROD

Chemical sterilization has long had an assured place for many purposes outside the body and for one upon it, namely, the pre-operative disinfection of the skin. What has been by no means so certain is the capacity of chemicals to disinfect a wound, whether before or after the onset of infection. There have been three eras of thought and practice in this connection, of which the third dates only from 1940.

The first of these periods extends from the pioneer work of Semmelweiss and Lister to the latter part of the last war. In the seventh decade of the last century, when pus ceased to be "laudable" and laparotomy to be homicidal, the great revolution wrought in surgery was due in large part to simple cleanliness and the introduction of methods now called aseptic. Whatever the share of antiseptics in first making surgery safe, carbolic acid is a very bad one by modern standards, and it was upon this that Lister relied. Its use, and that of cresols in various forms, which are almost equally caustic and destructive of tissues, continued for many years. Others employed in early days were mercury salts, which are also damaging to exposed tissues and inactivated by blood proteins, and boric acid and idoform, which have too weak an action on bacteria. These, and other more promising antiseptics such as sodium hypochlorite and the flavines were given what is said to have been a thorough trial in the last war, and were considered to have failed. In accounting for this it must be remembered that many of them, particularly cresol pastes and iodoform, were of highly unpromising composition; that gunshot wounds are usually deep and inaccessible to any external application, and that treatment was often delayed until infection was established. No such deliberate trial was staged under the more manageable conditions of civil practice, although the Casualty Department of any large hospital could have furnished ample material for it.

This failure was succeeded by the era of scepticism, lasting throughout the inter-war period. Most surgeons during this time when asked whether they believed that an antiseptic can disinfect a wound would say no. Why antiseptics were still used, and why some were preferred to others, there being a dozen different favourites, is hard to say: sheer habit and the attraction of colours and smells had a good deal to do with it. I have been given as a serious reason for using lysol in midwifery that patients expect it, associating the smell with safety—and this by a distinguished obstetrician. This negativistic calm was slightly ruffled by Colebrook's advocacy of Dettol as a prophylactic in midwifery, but it remained a dogma in the orthodox creed that all antiseptics do more damage to tissues than to bacteria, and hence more harm than good. This was actually not true of one class of antispetics, the flavines, which had been shown by numerous animal experiments to be capable of preventing wound infections: I have proclaimed the merits of the flavines in various journals, including the Reports of this hospital, for more than ten years to an unheeding world.

The rehabilitation of antisepsis as a method of wound treatment which has brought about another though less profound revolution in surgical methods during the past two years, followed from the discovery that sulphonamides act locally. These compounds have carried other antiseptics back into popularity on their backs; having discovered that one method works, the surgical world has re-opened its mind to others, some of which were available but neglected before. The pioneers in local sulphonamide therapy were Jensen, Johnsrud and Nelson, American surgeons who in 1939 treated compound fractures by placing sulphanilamide powder in the wound; but it was not until the following year that this treatment was given a rational basis and came into general use. For five years, from the introduction of prontosil in 1935, the action of this drug and its later derivatives was a mystery. Domagk himself, its inventor, and other German and particularly French authors wrote as if determined and persuaded that it would always remain a mystery: "true chemotherapy" in the German sense means something inscrutable and almost as obscure as the very nature of life itself. Several Continental authors produced

* *The substance of an address to the Clinical Club at Hill End Hospital, December 15th,* 1942.

red herrings which might well have deflected progress for much longer than they actually did: Levaditi, for example, claimed to have proved by experiment the very reverse of what we now know to be the truth, namely that sulphanilamide does not act locally but only after systemic administration. The credit for shattering the edifice of obscurantism which had been built round this problem belongs largely to Fildes and his collaborators, and was the first important practical outcome of ten years of patient work on the fundamentals of bacterial metabolism. As everyone now knows, they showed that sulphanilamide inhibits an enzyme reaction necessary for the utilization of *p*.aminobenzoic acid, a substance essential for the growth of certain bacteria. In any environment containing a certain excess of sulphanilamide over *p*.aminobenzoic acid, bacterial growth stops, and to stop bacterial growth means to overcome infection. Following a paper by Woods to this effect is one by Fildes showing that just as one of these substances neutralizes the other, so does glutathione neutralize the action on bacteria of mercury perchloride, and for a precisely parallel reason. No one woud venture to deny that mercury salts are antiseptics in the ordinary sense: sulphanilamide had therefore to be accepted on the same footing.

This discovery opened the door wide to the rational development of local chemotherapy. There are two main factors on which its success depends. One is self-evident, the freedom of sulphonamide compounds from toxic action on tissues, which is the main drawback of almost all other antiseptics. The other is the fact that when applied in powder form they dissolve slowly and hence persist in the wound in high concentration. Hawking, in an experimental study of the prevention of gas gangrene, found sulphathiazole the most effective, its solubility being such that it combines adequacy in both persistence and concentration; sulphanilamide is too soluble, being entirely absorbed within 24 hours, and sulphapyridine too insoluble, persisting for as long as ten days but never exceeding a concentration of about 40 mg. per cent. in the wound fluid. A certain critical solubility has therefore become a property newly desirable in antiseptics. How this method has been developed is familiar to all. It is at present our main resource for preventing sepsis in all kinds of wounds: it has smoothed the path of the plastic surgeon, and is finding application in one new site after another—the nose, ear and peritoneum. What is perhaps more interesting, although less immediately important, is the effect which this change of attitude to wound treatment is having on the production and use of other antiseptics altogether.

The Department of Bacterial Chemistry founded by Fildes is not merely resting on its laurels, but seeking extensions of the principle which explains the action of sulphanilamide, *p*.aminobenzoic acid is by no means the only substance essential for the growth of many pathogenic bacteria. Another is pantothenic acid, and if a compound could be synthesized which explains the action of sulphanilamide. pantothenic acid as sulphanilamide has to *p*.aminobenzoic acid, it should have the same inhibitory effect. Proceeding on the basis of this argument McIlwain has synthesized pantoyltaurine, which has the expected effect, is a more efficient inhibitor than sulphanilamide, and is believed to be non-toxic. Curative experiments in animals have not yet been reported: the therapeutic future of this promising compound is hence not yet known.

The flavines, which alone among the older antiseptics had a serious claim to be regarded as capable of preventing wound infection, have come into their own again in the more receptive atmosphere of today. Proflavine, which is to be preferred to acriflavine, was shown by Russell and Falconer to be almost innocuous to the exposed brain, and in Hawking's experiments on the prevention of gas gangrene it appears to have been fully as effective as the sulphonamides, although on quite inadequate grounds he denies it the credit which these results deserve. Proflavine has sprung suddenly into prominence owing to a paper by Mitchell and Buttle on the treatment of wounded in Libya. They used it not for the prevention of sepsis but for the far more difficult task of treating intractable suppuration which had resisted both local and systemic sulphonamide therapy. They used it for the first time in solid form, spreading the actual powder in the wound. That their remarkable success is due to adopting the method of application hitherto only used for sulphonamides there can be no doubt: the solubility of proflavine is 1 in 300, and this would ensure slow solution and persistent action. This is a very different thing from irrigaton for a few minutes, or applying a dressing soaked in proflavine solution, the material of which, as an opponent of the flavines has constantly reiterated, has a greater affinity for the antiseptic than have the tissues. This work,

and the success of hypochlorite inside the Bunyan bag, may well cause anyone to wonder whether most methods of application used in the past gave antiseptics any reasonable chance. I have always suspected that the success of Meleney with zinc peroxide is due not so much to the intrinsic virtues of this substance as to the arrangements he makes to keep the wound continuously bathed in a fluid suspension of it.

The other line of progress which has burst into activity lately is the development of "biological" antiseptics, *i.e.*, those produced by living things. Apart from the antiseptic substance in the excreta of certain maggots which accounts for the efficacy of implanting these in wounds — an unpleasant treatment which had a vogue some years ago, particularly for osteomyelitis—these substances are of microbic origin, and account for the phenomena of bacterial antagonism, the inhibition of the growth of one species by another. Everyone knows the story of the contaminated plate culture in Fleming's laboratory, in which a mould, later identified as *Penicillium notatum*, was evidently interfering with the growth of bacteria. The substance by virtue of which it does this, penicillin, was used for years only as an agent in selective media, since it attacks only certain bacteria, notably the pyogenic gram-positive cocci, and not others. Florey and others at Oxford have taken up the study of penicillin since the war began, purified it by an elaborate process, and shown its therapeutic value in staphylococcal infections: it can be given intravenously as well as applied locally. Their latest product will hinder the growth of staphylococci in a dilution of 1 in 160,000,000, and is even less toxic than its predecessors. The trouble is to get enough of it: the yield from enormous volumes of culture is very small. It is an absurd under-statement to say that pure penicillin is more than worth its weight in gold: it is probably the most precious substance used in Medicine with the single exception of radium. Meanwhile Raistrick and others have undertaken a systematic study of fungi, particularly of the genera *Penicillium* and *Aspergillus*, in the hope of finding further species yielding anti-bacterial products. Many do so of the hundreds which have now been tested: the yield from cultures is much larger than that of penicillin, and Raistrick has determined the chemical structure of some and actually synthesized them. Unfortunately all these other mould products are less antiseptic than penicillin, and so much more toxic that nothing more than local therapeutic use can be envisaged for them.

Some bacteria as well as fungi form substances antagonistic to other species. This has been recognised for many years but turned to little account before the recent work of Dubos which culminated in the discovery of "gramicidin." Dubos used an ingenious method for this work. He wanted to find an organism which would attack staphylococci: he therefore made a mixture of many samples of soil which would naturally contain an enormous variety of bacteria, kept it moist, buffered, and at a constant temperature, and fed it for two years with suspensions of staphylococci. Only those soil bacteria continued to grow which could attack staphylococci and derive nutriment from them: hence he bred out a sporing gram-positive aerobic bacillus, now considered to be *B. brevis*, an extract of which proved to be highly destructive not only to staphylococci but to streptococci and pneumococci as well. Either the crude extract (tyrothricin) or one of its constituents (gramicidin) can be used for the local treatment of infection by these organisms, and the few clinical reports so far published are favourable. Although gramicidin will in fact save the lives of mice experimentally infected with pneumococci, it is considered too toxic for systemic use in man.

All these remarkable developments have taken place during the past two or three years, and are owing largely to the demands made by war for better methods of preventing and treating wound infections. It would be foolish to predict where they will ultimately lead, but quite enough has happened already to re-establish antisepsis as a sound method of wound treatment. The last war was supposed to have shown that antiseptics are useless: during this one that decision has been finally reversed.

References

Abraham, E. P., Gardner, A. D., Chain, E., Heatley, N. G., Fletcher, C. M., Jennings, M. A., and Florey, H. W., Lancet, 1941, ii, 177.

Domagk, G., Klin. Wochenschr, 1937, *16*, 1412.

Dubos, R. J., and Hotchkiss, R. D., J. Exper. Med., 1941, *73*, 629.

Fildes, P., Brit. J. Exper. Path., 1940, *21*, 67.

Florey, H. W., and Jennings, M.A., Ibid., 1942, *23*, 120.

Garrod, L. P., St. Bart.'s Hosp. Rpts., 1931, *64*, 85.

Hawking, F., Brit. Med. Journ., 1941, i, 263.

Jensen, N. K., Johnsrud, L. W., and Nelson, M. C., Surgery, 1939, *6*, 1.

Levaditi, C., and Vaisman, A., Compt. rend. Soc. Biol., 1939, *128*, 476.

McIwain, H., Brit. J. Exper. Path., 1942, *23*, 95.
Meleney, F. L., and Harvey, H. D., Ann. Surg., 1939, *110*, 1067.
Mitchell, G. A. G., and Buttle, G. A. H., Lancet, 1942, ii, 416.
Raistrick, H., Smith, G., and Oxford, A. E. Chemistry and Industry, 1941, *60*, 828, 1942, *61*, 22, 48.
Russell, D. A., and Falconer, M. A., Brit. J. Surg., 1940-41, *28*, 472.
Woods, D. D., Brit. J. Exper. Path., 1940, *21*, 74.

AN UNUSUAL CASE OF CHOLECYSTITIS

By P. R. WESTALL

The common result of chronic cholecystitis is cholelithiasis with a small gall bladder, its walls being thickened and contracted. This case is reported because of the unusual state of the biliary system after a long history of cholecystitis in which there was a large stone in the common duct with enlargement of the gall bladder and without jaundice.

HISTORY

Mrs. W., age 66, was admitted to Hill End Hospital complaining of pain under the right breast with occasional vomiting, on May 20th, 1942. Her symptoms started in January, 1939, with a sudden onset of an attack of vomiting, faintness, and griping pains across the epigastrium. Further attacks of pain which occasionally radiated across from right epigastrium to left, and caused the patient to double up, together with faintness, exhaustion and occasional vomiting, occurred at, roughly, three weeks' intervals until May, 1940. They would come on at any time of the day or night, and bore no relation to meals. There was much flatulence, and passage of wind upwards helped to relieve the pain, which was also relieved by vomiting, and by drinking water; there was no relation of discomfort to fatty foods. The attacks became more frequent and severe until May, 1940, when an operation was undertaken for gall stones. At operation a mobile right kidney was found, and was treated. The patient remained in hospital five weeks, then returning home. Further recurrences of pain followed in August, after which she was free from these attacks until July, 1941. Her appetite was always steady; the patient lost nearly two stone during the period of attacks. In the autumn and winter of 1941 the attacks again began to recur, each being similar to the previous ones, but at very frequent intervals (one or two per week). This continued until April, 1942, when she was admitted to St. Bartholomew's Hospital. Attacks were now almost daily occurrences, and she was found to have a swelling under the right costal margin, thought to be the gall bladder. Her weight had decreased by a further two stone. The motions were somewhat pale during the previous month, and the urine was described as being darker than usual during the past few months. There was no other relevant symptoms.

PAST HISTORY

She had hip disease when 35, following on a bicycle accident, and has been unable to walk properly since. No relevant family history was forthcoming.

ON EXAMINATION

A pale, thin, ill-looking woman. Temperature normal; pulse 80; no clinical evidence of jaundice. Mouth edentulous, tongue clean and moist. Blood-pressure 170/80. Cardiac impulse forceful, with apex beat 5½ in. from midline, but with a scoliosis in lumbo-dorsal region and a lumber lordosis. Second heart sound was muffled at apex. Systolic murmur conducted to axilla at apex. Systolic murmur at aortic base. Liver palpable 4 finger-breadths below costal margin, smooth surface, and not tender. Lower pole of the right kidney palpable. No tenderness over the gall bladder. No abnormal constituent in the urine. Plain X-rays showed no opacities in the biliary system, and a normal stomach and duodenum. A cholecystogram showed failure of the gall bladder to fill with the opaque medium, indicating a pathological lesion in the biliary tract.

When under observation, she had an attack of very acute epigastric pain which caused her to collapse. On examination of the abdomen, the distended gall bladder could be felt.

At operation, a large distended gall bladder, containing no stones, was found. The cystic duct and common bile duct were distended and dilated. A large gall stone was extracted from the terminal end of the common duct, with one small faceted fragment. The gallstone was large, sausage shaped, with an orange soft surface, and central harder dark core of different material, apparently bile pigment. The condition of the patient was subsequently satisfactory.

CONCLUSIONS

The combination of pain with distension of the gall bladder and without jaundice strongly suggested a stone obstructing the outlet from the gall bladder. There is, however, a possibility that latent jaundice may have occurred, but no chemical tests were done, and it still remains unusual for so slight a degree of jaundice to occur under the existing conditions. Though Courvoisier's Law cannot be applied to this case, since evidence of clinical jaundice is absent, it must be rare for stones in the common duct to produce distension of the gall bladder. A possible explanation may lie in the unusually wide cystic duct which could have permitted a small stone, formed in the gall bladder before fibrosis had occurred, to pass into the common duct; and later this same circumstance accounted for distension of the gall bladder as well as of

the common duct when the stone had become large enough to block the duct. Alternatively the stones, since they consisted mostly of bile pigment, may have been formed in the duct, and cholecystitis need never have been present. Even if one of these explanations be accepted, the absence of clinical jaundice, in spite of a pressure in the biliary system sufficient to distend the gall bladder, is surprising. It is probable, however, that obstruction of the common duct must be present for an appreciable time before jaundice becomes recognizable clinically, and, in this case, each attack of pain was of brief duration.

SUMMARY

A case of cholecystitis with gall stones is recorded which, although of 3 years' duration, was found to be associated with a distended and dilated biliary system, and a large gall stone in the terminal part of the common duct. Attacks of pain persisted for several years, but no history of jaundice was apparent. Removal of the gall bladder and gall stones resulted in satisfactory improvement of the condition. The case is interesting in that distension of the biliary system together with stone in the common duct is not associated with any clinical jaundice, although obvious distension of the gall bladder occurred, during the attacks of biliary colic.

My thanks are due to Professor J. Paterson Ross for permission to publish this case, and for considerable help in the preparation of this article.

CENTRES OF AESCULAPIUS

By P. F. LUCAS

In these days when travel is difficult and we are to a great extent bound within the confines of this island, many of us grudge the opportunities enjoyed by those who worked in more peaceful times of visiting other countries. When Osler was visiting Vienna, early in this century, he wrote a letter back to his friends in America in which he dwelt on the advantages of foreign travel and said that in spite of the excellence of the Medical School at Vienna "the Aesculapian centre has moved from the Danube to the Spree. But this is what has happened in all ages. Minerva Medica has never had her chief temples in any one country for more than a generation or two." Many books have been written on the strange cycle in which the power in the world seems to move, at first one nation reaching the ascendancy only to be displaced by another, but I have been unable to find any account of a similar cycle in medicine. Nevertheless the great figures of medicine, and for that matter of music and painting, have arisen in different countries dominating their several spheres for some years before handing on the torch to others: and seldom it happens that one nation occupies this peak a second time.

Our studies start in the obscurity of mythology, for those traditionally bound up with the healing art were inextricably involved with the Gods. The earliest known diety associated with medicine was Ea, worshipped by the Babylonians. As a reward for their faithful service Ea's son Adapa was incarnate on earth about 3,500 B.C. From the Egyptian papyri we learn of I-em-Hêtep. He was in all probability a real person who lived about the same time as Adapa and was elevated to the position of demi-god. Contemporary with this Egyptian divinity, Atreya, a Hindu Vedic Saint, wrote the first known book on medicine—the Atreya Samhita: and at a slightly later date Wong Tai covered twelve volumes with his knowledge of medicine in China. However, as Sir Henry Maine says, "To one small people it was given to create the principle of progress, that people was the Greek": and it is to Greece that we must go. Here Apollo, the Greek God of medicine, had a son Asklepios.

". . . the great master
Who joined the limbs of torn Hippolytus,
And brought upon himself the thunderer's
wrath."

But before suffering death at the hand of Zeus, Asklepios had passed on his skill to his sons and his daughter Hygeia, and they watched over the health of men until Hippocrates came to loosen the shackles of superstition and philosophy in 460 B.C. Here at the Coan School rational medicine was first taught and although its practical methods were soon to be overcome

McIwain, H., Brit. J. Exper. Path., 1942, *23*, 95.
Meleney, F. L., and Harvey, H. D., Ann. Surg., 1939, *110*, 1067.
Mitchell, G. A. G., and Buttle, G. A. H., Lancet, 1942, ii, 416.
Raistrick, H., Smith, G., and Oxford, A. E. Chemistry and Industry, 1941, *60*, 828, 1942, *61*, 22, 48.
Russell, D. A., and Falconer, M. A., Brit. J. Surg., 1940-41, *28*, 472.
Woods, D. D., Brit. J. Exper. Path., 1940, *21*, 74.

AN UNUSUAL CASE OF CHOLECYSTITIS

By P. R. WESTALL

The common result of chronic cholecystitis is cholelithiasis with a small gall bladder, its walls being thickened and contracted. This case is reported because of the unusual state of the biliary system after a long history of cholecystitis in which there was a large stone in the common duct with enlargement of the gall bladder and without jaundice.

HISTORY

Mrs. W., age 66, was admitted to Hill End Hospital complaining of pain under the right breast with occasional vomiting, on May 20th, 1942. Her symptoms started in January, 1939, with a sudden onset of an attack of vomiting, faintness, and griping pains across the epigastrium. Further attacks of pain which occasionally radiated across from right epigastrium to left, and caused the patient to double up, together with faintness, exhaustion and occasional vomiting, occurred at, roughly, three weeks' intervals until May, 1940. They would come on at any time of the day or night, and bore no relation to meals. There was much flatulence, and passage of wind upwards helped to relieve the pain, which was also relieved by vomiting, and by drinking water; there was no relation of discomfort to fatty foods. The attacks became more frequent and severe until May, 1940, when an operation was undertaken for gall stones. At operation a mobile right kidney was found, and was treated. The patient remained in hospital five weeks, then returning home. Further recurrences of pain followed in August, after which she was free from these attacks until July, 1941. Her appetite was always steady; the patient lost nearly two stone during the period of attacks. In the autumn and winter of 1941 the attacks again began to recur, each being similar to the previous ones, but at very frequent intervals (one or two per week). This continued until April, 1942, when she was admitted to St. Bartholomew's Hospital. Attacks were now almost daily occurrences, and she was found to have a swelling under the right costal margin, thought to be the gall bladder. Her weight had decreased by a further two stone. The motions were somewhat pale during the previous month, and the urine was described as being darker than usual during the past few months. There was no other relevant symptoms.

PAST HISTORY

She had hip disease when 35, following on a bicycle accident, and has been unable to walk properly since. No relevant family history was forthcoming.

ON EXAMINATION

A pale, thin, ill-looking woman. Temperature normal; pulse 80; no clinical evidence of jaundice. Mouth edentulous, tongue clean and moist. Blood-pressure 170/80. Cardiac impulse forceful, with apex beat 5¼ in. from midline, but with a scoliosis in lumbo-dorsal region and a lumber lordosis. Second heart sound was muffled at apex. Systolic murmur conducted to axilla at apex. Systolic murmur at aortic base. Liver palpable 4 finger-breadths below costal margin, smooth surface, and not tender. Lower pole of the right kidney palpable. No tenderness over the gall bladder. No abnormal constituent in the urine. Plain X-rays showed no opacities in the biliary system, and a normal stomach and duodenum. A cholecystogram showed failure of the gall bladder to fill with the opaque medium, indicating a pathological lesion in the biliary tract.

When under observation, she had an attack of very acute epigastric pain which caused her to collapse. On examination of the abdomen, the distended gall bladder could be felt.

At operation, a large distended gall bladder, containing no stones, was found. The cystic duct and common bile duct were distended and dilated. A large gall stone was extracted from the terminal end of the common duct, with one small faceted fragment. The gallstone was large, sausage shaped, with an orange soft surface, and central harder dark core of different material, apparently bile pigment. The condition of the patient was subsequently satisfactory.

CONCLUSIONS

The combination of pain with distension of the gall bladder and without jaundice strongly suggested a stone obstructing the outlet from the gall bladder. There is, however, a possibility that latent jaundice may have occurred, but no chemical tests were done, and it still remains unusual for so slight a degree of jaundice to occur under the existing conditions. Though Courvoisier's Law cannot be applied to this case, since evidence of clinical jaundice is absent, it must be rare for stones in the common duct to produce distension of the gall bladder. A possible explanation may lie in the unusually wide cystic duct which could have permitted a small stone, formed in the gall bladder before fibrosis had occurred, to pass into the common duct; and later this same circumstance accounted for distension of the gall bladder as well as of

the common duct when the stone had become large enough to block the duct. Alternatively the stones, since they consisted mostly of bile pigment, may have been formed in the duct, and cholecystitis need never have been present. Even if one of these explanations be accepted, the absence of clinical jaundice, in spite of a pressure in the biliary system sufficient to distend the gall bladder, is surprising. It is probable, however, that obstruction of the common duct must be present for an appreciable time before jaundice becomes recognizable clinically, and, in this case, each attack of pain was of brief duration.

SUMMARY

A case of cholecystitis with gall stones is recorded which, although of 3 years' duration, was found to be associated with a distended and dilated biliary system, and a large gall stone in the terminal part of the common duct. Attacks of pain persisted for several years, but no history of jaundice was apparent. Removal of the gall bladder and gall stones resulted in satisfactory improvement of the condition. The case is interesting in that distension of the biliary system together with stone in the common duct is not associated with any clinical jaundice, although obvious distension of the gall bladder occurred, during the attacks of biliary colic.

My thanks are due to Professor J. Paterson Ross for permission to publish this case, and for considerable help in the preparation of this article.

CENTRES OF AESCULAPIUS

By P. F. LUCAS

In these days when travel is difficult and we are to a great extent bound within the confines of this island, many of us grudge the opportunities enjoyed by those who worked in more peaceful times of visiting other countries. When Osler was visiting Vienna, early in this century, he wrote a letter back to his friends in America in which he dwelt on the advantages of foreign travel and said that in spite of the excellence of the Medical School at Vienna "the Aesculapian centre has moved from the Danube to the Spree. But this is what has happened in all ages. Minerva Medica has never had her chief temples in any one country for more than a generation or two." Many books have been written on the strange cycle in which the power in the world seems to move, at first one nation reaching the ascendancy only to be displaced by another, but I have been unable to find any account of a similar cycle in medicine. Nevertheless the great figures of medicine, and for that matter of music and painting, have arisen in different countries dominating their several spheres for some years before handing on the torch to others: and seldom it happens that one nation occupies this peak a second time.

Our studies start in the obscurity of mythology, for those traditionally bound up with the healing art were inextricably involved with the Gods. The earliest known diety associated with medicine was Ea, worshipped by the Babylonians. As a reward for their faithful service Ea's son Adapa was incarnate on earth about 3,500 B.C. From the Egyptian papyri we learn of I-em-Hêtep. He was in all probability a real person who lived about the same time as Adapa and was elevated to the position of demi-god. Contemporary with this Egyptian divinity, Atreya, a Hindu Vedic Saint, wrote the first known book on medicine—the Atreya Samhita: and at a slightly later date Wong Tai covered twelve volumes with his knowledge of medicine in China. However, as Sir Henry Maine says, "To one small people it was given to create the principle of progress, that people was the Greek": and it is to Greece that we must go. Here Apollo, the Greek God of medicine, had a son Asklepios.

" . . . the great master
Who joined the limbs of torn Hippolytus,
And brought upon himself the thunderer's
wrath."

But before suffering death at the hand of Zeus, Asklepios had passed on his skill to his sons and his daughter Hygeia, and they watched over the health of men until Hippocrates came to loosen the shackles of superstition and philosophy in 460 B.C. Here at the Coan School rational medicine was first taught and although its practical methods were soon to be overcome

by the theorizing of the Dogmatists it did form a basis for the work of the future. Before we pass on to Rome we must cross the Mediterranean sea to Alexandria: Herophilus and Erasistratus are names which stand out at this period and it was here that Galen acquired much of the knowledge which enabled him to dwarf his era as Hippocrates had before him. At the time of the great plague epidemic in Rome in 293 B.C. the people, dissatisfied with their own physicians, turned to the Greek God Asklepios and besought his aid: their prayers were evidently heard to the satisfaction of the Romans for they made Asklepios their chief divinity under the name of Aesculapius. In Rome two men dominate the history of the period; first Celsus and later Galen. The former was the author of a book, "De Re Medica," which was a standard text until the last century: this work was both medical and surgical for although some men confined their attention to a particular group of diseases, medicine and surgery had not divorced one another as they seem to have done today. Galen, the Prince of Physicians, did a great deal of valuable dissection and experimental work. His influence was so profound that even in the sixteenth century a man was expelled from the Royal College of Physicians in London for daring to gainsay him. In 846 A.D. the famous School of Salernum was founded and continued to be the centre of medical culture until about 900 A.D. when Arabian medicine reached its zenith. Rhazes and Avicenna were chiefly responsible for our interest in this country. Both men wrote vast tomes but little original work was done and most of their writings consisted of compilations of the works of others and additions to the already voluminous materia medica.

From this time until Italy again came to the fore at the end of the fifteenth century our trail becomes indistinct amidst a dense undergrowth of ignorance when the precepts of Hippocrates were forgotten and medicine again became merged with witchcraft. I think the laurels for these years must go to France. At Montpelier Gui de Chauliac, the author of an important book on surgery, Henri de Mondeville and Lanfranc of Milan were founding a surgical school which two hundred years later was to produce Ambroise Paré. Avenzoar of Spain deserves mention: he was the first to describe the Acarus Scabei and he also practised abdominal surgery.

Towards the end of the fifteenth century the basic sciences of anatomy and physiology and later pathology were studied. Italy again was the first to cry "Fiction to the right! reality to the left." Padua and Bologna were the centres of the work done: the ban on the dissection of human bodies was lifted and many of the fallacies, which arose from Galen's dissection of animals, were brought to light. It was in anatomy that this second great period of Italian medicine excelled. The beautiful dissections and drawings of Leonardo da Vinci inspired Vesalius to write his "De Humanis Corporis Fabrica." Here was a man who in spite of the antipathy of the Church, in a world that was ruled by religious feeling, risked the long and evil arm of the Inquisition and obeyed the injunction of Christian to Faithful to "Speak bold, man, the truth is on thy side."

Meanwhile, further North, Paracelsus was hard at work trying to free the world from the oppressive, confining influence of the old theories which had held sway without question for so many years. He burnt the works of Galen and Avicenna in front of his students, and, although imbued with an overwhelming sense of his own importance, did much to emancipate freedom of thought from the impeding influence of old authorities, and to encourage men to seek out the truth for themselves. Now in England the study of medicine had been sporadically carried on since the time of Cynifrid, the first known English doctor: men like John Arderne and John Gaddesden are particularly worthy of mention but it was Thomas Linacre who first attempted scientific medicine in these islands and England's place in Medical History dates from his foundation of the Royal College of Physicians in 1518: "these years of vague, restless speculation had now lasted long enough, and it was time for the Meisterjahre of quiet, methodical research to succeed if science was to acquire steady and sedentary habits instead of losing itself in a maze of phantasies, revolving in idle circles." (Gomperz.) Linacre was followed by Caius and later by Glisson and Harvey. Now came the advance of physiology as we saw that of anatomy in Italy: Harvey served the one as Vesalius served the other. Harvey's work would not have been possible without the anatomical grounding he received at Padua under Fabricius: he encouraged the world "to seek out Nature by observation and experiment" instead of composing theories and disregarding facts. Here I must mention Francis Bacon, who although he said himself "I only sound the clarion but I enter not into the battle," did "more than anyone else to free the intellect

from preconceived notions." There was needed a clinician worthy of the sure foundations which were being built for his work. We have not long to wait for here was the advent of Sydenham, " the English Hippocrates." Sydenham put the practical side of medicine on a sound basis, improving on the work of his predecessor Glisson : his motto speaks for him : " Thou nature art my Goddess : to thy law my services are bound.' Surgery, now some way behind its sister, also had its followers. Chief amongst these was Richard Wiseman. Like Ambroise Paré, the French surgeon of the sixteenth century, most of his experience was gained during war and both these men did a great deal to discard the more brutal methods of previous ages and to introduce more efficient, though scarcely more humane ones. Meanwhile the Italian traditions were being kept alive, and mention must be made of Malpighi and Morgagni for their valuable work particularly in the field of pathology largely made possible by Leunwenhoeck's development of the microscope.

But another was arisen to displace these men as high priests : Herman Boerhaave of Leyden. Claiming Hippocrates and Sydenham as his models he built up the greatest practice and the greatest medical school the world had ever seen. He introduced to Leyden the bedside teaching which Malpighi had started at Padua and the benefit of it was soon spread throughout the world. Leyden was the first place on the list of the " Wanderjahre " indulged in by the aspiring medical student of the day. Boerhaave continued to extend his reputation until his death in 1738 when we must again cross the channel to the England of James Douglas, Cheselden, Pott, Cullen and Monro, to be followed by the Hunters and Edward Jenner. I hope I may group the English and the Scottish together : may I take for my excuse the words of Johnson : " the finest prospect to a Scotsman is the road that leads to England." They had hard work to induce our goddess to set up her standard in these islands but I think that they succeeded despite Van Swieten, Von Haller and others of Boerhaave's pupils. John Hunter must take pride of place amongst them; Trotter says " It needs all our imaginative sympathy to picture the twilit country in which his labours were carried on—the air is dim and thick, the range of vision short, the appearance of things ambiguous " : and yet he accomplished an enormous amount of work with very far-reaching results : he left us his advice, " Don't think, try : be patient, be accurate," and his museum " that apotheosis of pathology " as Sir James Paget calls it. So our main attention is directed towards England until after the great work of Jenner in 1798, when we cross back to France where we shall stay for the next half century.

This is the age of the men who taught us to examine the human body, the value of physical signs and the means of eliciting them. Led by Laennec, Bichat, Charcot, Louis, Broussais, Dupuytren, Cuvier, Marie and Trousseau their motto was : " Not to take authority when I can have facts : not to guess when I can know : not to think a man must take physic because he is ill." Louis introduced the numerical method : the examination of a large number cases with strict attention to detail without which a clear idea of the natural history of any disease cannot be reached : "Ars medica tota est in observationibus." Now we must move on again wherever the initiative is greatest : this time to Vienna. Billroth, Rokitansky, Skoda, Bamberger, Hyrtl and Semmelweiss occupied the centre of the picture; some past their best days, others with their lives before them. It is still the age of the clinician although the pathologist is beginning to overshadow the picture. As we move northward to Berlin the pathologist and bacteriologist come even more to the fore. It is difficult to know where to turn : the Americans and Sir James Young Simpson are perfecting their anaesthetics and Lord Lister is applying Pasteur's work to medicine and surgery : nevertheless it is to Berlin that we must go. Virchow is propagating his doctrine : " Omnis cellula e cellula." He applied all his Teuton perseverence to the natural history of disease : no theory was accepted that was not proven—"An unproved hypothesis of any kind is a very leaky bottom for practical medicine to sail or trade upon." Mention must also be made of Muller, Traube, Koch, Frerichs, Recklingshausen and Erhlich.

Now let us stop and survey our travels. We have passed from the days when all healing was in the hands of the Gods and their priests who were equally likely to deal out death as life, to Asia and finally to Europe. What countries have we not visited? They are the New World, Northern Europe, Africa, Japan and the large islands of the Southern Pacific. It has always been easier to assess the value of work done many years ago than of that undertaken more recently which has not been placed in its proper perspective. Nevertheless it is my opinion that the labours of her many followers in the Continent of America have drawn

Minerva Medica across the Atlantic where she remains today.

Let us hope that in the happier days ahead we may again be able to give and take of the best methods available in a world purged of that chauvinism which imposes such hindrance on all attempts at advancement. Recall the words of Gomperz, "the best physicians must be the best observers, but the man who sees keenly, who hears clearly, and whose senses, powerful at the start, are sharpened and refined by consant exercise, will only in exceptional instances be a visionary or a dreamer."

THE DENTAL EMERGENCY

By G. A. Cowan

The dental emergency, like those associated with other organs, appears to the doctor to have a predilection for the hours of night. There is an element of truth in this as far as the teeth are concerned, for which there is an explanation. During the hours of darkness a not inconsiderable proportion of the population adopts a recumbent position which increases the blood flow to the head. This may be enough to cause a post-extraction hæmorrhage or to increase congestion in an inflamed pulp. The public, with an instinctive dislike of troubling the dentist at any time, does not call on him after hours and has appointed the doctor to do the dental night shift. In more normal times, whilst it was desirable that every doctor should be capable of dealing with the dental emergency, it was not an essential for the vast majority who were within reach of the dentist. A knowledge of dental surgery was only necessary for those going to practice in remote areas or as ships' surgeons, where no dentist was readily available. Present conditions, however, make such knowledge a necessity for almost all, especially those in the Services. Every student, therefore, should make a point of becoming familiar with the commoner dental conditions and of gaining some practical knowledge of extraction.

The object of this article is to give simple methods of dealing with the dental emergency temporarily until more expert help can be obtained.

Toothache. The usual cause of this is a carious tooth, but it may also be caused by other conditions such as Vincent's infection of the gums, antritis, etc.

The first thing to do is to diagnose the cause. Where this is found to be a carious tooth the treatment will depend on the condition in the tooth itself. The pain may be due to either (a) pressure by food particles in a carious cavity on an exposed pulp or acute inflammation of the pulp, or (b) acute inflammation of the periodontal membrane and apical infection, i.e., the early stages of an acute alveolar abscess.

Differential diagnosis. In (a) Pulpitis, the pain is often brought on suddenly by hard particles of food entering the carious cavity. It is very violent, sharp and lancinating and is increased by hot or cold food or liquid. Gentle percussion of the tooth does not affect the pain. In (b) Periodontitis, the pain is dull, increasing gradually, and the patient describes the tooth as feeling higher than the other teeth. The tooth is very sensitive to pressure or even contact of the opposing teeth. The lightest percussion on the tooth increases the pain. Thermal changes have little effect, although cold water, by reducing congestion, sometimes gives momentary relief.

Treatment. (a) Pulpitis. Place patient sitting in a good light with head supported and let him rinse his mouth with warm water. Very gently swab out the cavity in the affected tooth, for it may be acutely sensitive, with a pledget of cotton wool moistened with warm water, or flush cavity gently with a stream of warm water from a syringe. Insert a pledget of dry cotton wool into the cavity. On a piece of glass or any smooth surface, place a drop of Oil of Cloves and a small quantity of Zinc Oxide powder. Add powder to the oil and spatulate with a scalpel until a putty-like consistency is obtained. Remove the cotton wool from the cavity and wipe gently with dry wool to get the cavity as dry as possible. It will help if the tooth is surrounded by cotton wool. Then, with the bent end of a soft probe, introduce the mixture into the cavity and gently press it in with moistened cotton wool held in tweezers. After a minute or two there should be relief from pain. The mixture will gradually set and

harden in the cavity and will give comfort and protection during meals for several days or even weeks.

A simpler method is to swab out the cavity as before and get it as dry as possible and insert a pledget of wool soaked in Oil of Cloves. Remove excess oil with a pledget of dry wool, then cover with a little dry wool.

If Oil of Cloves should be unobtainable, wipe out cavity as before and touch floor of cavity gently with a tiny pellet of cotton wool moistened with pure carbolic acid.

The two latter methods will probably only give relief for a short time and the danger of carbolic acid is that it may damage the pulp.

Relief for an hour or two may also be obtained by infiltration of the surrounding gum with 2% Novocaine solution. The needle should be inserted into the gum over the root apex on the buccal or labial surface until the alveolar bone is felt and 2 c.c. injected.

(b) Periodontitis. In this condition the tooth cavity is not sensitive to touch, for the pulp is dead. The pain is due to inflammation at the root apex with the formation of pus which invades the pulp chamber. If the pus can be released, the pain will disappear.

Place the patient as described above and let him rinse. Wash out the tooth cavity. Take a stout hypodermic needle and push it gently and gradually through the floor of the cavity into the pulp chamber. A bead of pus or serum will appear and the pain will gradually go.

Do not infiltrate the gum with a local anæsthetic in this condition as the infection may have invaded the periapical tissues. Apply a counter-irritant such as Tincture Iodine Fort. to the gum over the root.

A late stage of this is the acute alveolar abscess. The face is swollen and the abscess seen pointing in the sulcus in the region of the tooth. This should be incised and the pus released.

As in all painful conditions, analgesics will help.

Toothache may be caused by Vincent's infection of the gingivae. The pain, however, is not localised to any one tooth, but is diffuse and the condition will be diagnosed on inspection.

The rarer causes of toothache such an antritis and impacted mandibular molars are of necessity omitted.

Post-extraction Hæmorrhage. This is usually either of the Primary type, occurring at the time of extraction and not ceasing readily, or Reactionary, coming on some few hours after extraction. True Secondary hæmorrhage is rare. The treatment of Primary and Reactionary hæmorrhage is the same. The basis of treatment is pressure, on the principle of a tight bandage. The patient will usually present himself with a mouth full of blood and clots and will be found to have been rinsing his mouth continuously. Wipe away clots with gauze and allow patient to rinse out blood wtih warm water. Place a firm wad of cotton wool on top of the bleeding socket, and instruct patient to bite firmly on to this. Make sure it is big enough for him to be able to do this. Leave in this position for fifteen or twenty minutes. Remove pad and examine socket. In the vast majority of cases the bleeding will have stopped. If this does not succeed, compress the socket by squeezing the alveolar walls between finger and thumb and maintaining the pressure for about five minutes. Then apply pad as before. Styptics may be used on the pad, of which the best are Oil of Turpentine and Russell Viper venom. (Adrenalin is not recommended as it may give an immediate result but when the effect on the blood vessels has ceased, the bleeding may recur.) If these fail, then the socket must be plugged. This is best done with a small cone-shaped plug of cotton wool soaked in a styptic which is pushed firmly into the bleeding socket. On top of this place a pad of wool, let the patient bite hard and apply a Barrel bandage to keep the jaws closed and give support. Instruct the patient not to lie down, or at all events, to have a pillow supporting the head. If the gum is lacerated a suture may be inserted. Silk is best used for this purpose, being soft and not irritating to the tongue.

A word of warning is necessary here, and that concerns hæmophiliacs. Suturing of the socket should not be done in this condition as it may give a false sense of security by stopping the bleeding into the mouth. However, the bleeding may continue and extravasate beneath the mucous membrane. In the case of a mandibular tooth, the hæmorrhage may invade the submucosa of the floor of the mouth, thence through the base of the tongue to the larynx with fatal consequences.

Extraction should be avoided, as far as possible, in a hæmophiliac but should it become necessary, then the control of hæmorrhage must be started immediately. A styptic should be used and the best is Russell Viper venom. The technique I adopt is to fill the socket with snake venom by means of a small syringe with a canula attached and then apply a small pad of wool soaked in venom and on top of this a

pad of dry wool for biting pressure. A Barrel bandage is then applied. Arrangements for blood transfusion must be ready.

Trismus of dental origin. The commonest cause is infection of the tissues surrounding an incompletely erupted mandibular third molar. This should be treated by hot mouth washes of slightly hypertonic saline and when the trismus has lessened, the causative condition treated. This is preferable to forcing the mouth open under anæsthesia.

Dislocation of the mandible. This is a dislocation of the temporomandibular joint and may occur during extraction by too heavy downward pressure on the mandible without support, or by forcing the jaw open too widely with a Mason gag. The condyle of the mandible moves forward out of the glenoid fossa and over the eminentia articularis. The patient appears with his mouth wide open and is unable to close. The lower jaw projects, saliva dribbles and there is some pain and alteration of speech. Palpation of the temporomandibular point will confirm the diagnosis. The condition is usually bilateral but may be unilateral. The treatment is reduction, which can usually be done without anæsthesia. Wrap gauze around the thumbs and press downwards and forwards on the mandibular molars and raise the chin with the fingers. This will disengage the condyle and allow it to slip back into the glenoid fossa. Apply a four-tailed bandage for a few days.

Fracture of the jaws. Expert help must be obtained at the earliest possible moment, and the aims of first aid treatment are to arrest hæmorrhage, treat shock, support the parts and make the patient as comfortable and as safe as possible.

Remove teeth lying loose in the mouth and keep the mouth clean by mouth-washes and irrigation. Where there are teeth standing in both jaws, the jaws should be closed, the opposing teeth brought into occlusion as far as possible and a Barrel bandage applied to support the mandible. The four-tailed bandage should be avoided as it tends to force the mandible backwards and so increase displacement and may even be a danger as will be explained later. Extraction of teeth, even if loose, should not be done at this stage; they should be gently pressed back into their correct position. In the case of an edentulous jaw, if the artificial denture is intact it should be used as a splint and a Barrel bandage applied.

In fractures of the mandible in the region of the symphysis due to explosives, where there is much comminution and destruction of bone, a great danger is loss of control of the tongue, allowing it to slip back into the throat and cause suffocation. A four-tailed bandage pulling the mandible backwards is therefore dangerous. Those so wounded should, if possible, be brought in walking with the head downwards or, if on a stretcher, carried face downwards with head over the end of the stretcher. If being sent by ambulance, steps should be taken to see that the tongue can be kept forward, if necessary by a suture passed through it with long ends brought out of the mouth.

There must be no suturing around the mouth that is likely to restrict the size of the orifice.

The important thing is to contact the maxillo-facial unit as quickly as possible.

SIR ROBERT ARMSTRONG-JONES

IN MEMORIAM

We meet today in memory of a great gentleman, great because of his spirit, of his mind, and of his body—the whole man.

Robert Armstrong-Jones having been born late in 1857, had a long life, which on account of a strong body, he was enabled to use so greatly for the welfare of others.

Qualifying at the age of 23, by dint of hard study he was able to proceed to the Doctorate of Medicine of the University of London, to the Fellowship of the Royal College of Surgeons of England, and finally he was elected a Fellow of the Royal College of Physicians of London, a no mean series of accomplishments.

Soon it became apparent to him that his bent should be the prevention as well as the cure of mental ailments, and in this line he was eminently successful in thousands of instances.

His selection some fifty years ago to be head

of the newly established mental hospital at Claybury gave him the unique opportunity of advancing knowledge, both by his own observations and by his collaboration with the late Sir Frederick Mott.

Further, his appointment in due time to the Lectureship on Mental Diseases at our Medical College here enabled him to bring about that important and close association between the student and the patient suffering from mental abberation.

Many honours, too numerous to mention here, came to him, all well-deserved, and all greatly appreciated.

His lectures, his addresses and his articles, on subjects relating to mental physiology and mental pathology, with his textbook on Mental Nursing, all have been an inspiration to those privileged to hear or read them.

To all his friends, and they were many, to all his professional colleagues, not a few, and to all his pupils, numbering hundreds, he was ever a stimulus and a help.

He was keenly interested in all matters concerning the well-being of the people, and his statements, always scientific, on the effects of alcohol on mental and bodily processes were ever worthy of attention.

His charming manner, his well-informed conversation and his flow of ideas were the envy of all of us who came into contact with him.

By his passing, the medical profession has lost an honoured elder brother, this College a past revered teacher, and the public a servant who never spared himself for its benefit.

To his gracious lady, to his daughters, and his son, we would tender our sympathy, and by our presence here today give evidence to them of our appreciation of the value that their loved one has been to so many of us gathered to do honour to his memory.

Vale. Resquiat in pace.

W. McA. E.

THE PLACE OF RADIOLOGY IN MEDICAL TEACHING

By J. V. Sparks

There has arisen in the past 45 years a new branch of medicine which has gradually revolutionised the practice of medicine and surgery.

For the student, the intelligent utilisation of X-Rays has simplified rather than complicated his problems, and has given an additional means for the detection or confirmation of disease—one, however, which should be utilised as an addition and not as a substitute for other well recognised clinical aids to diagnosis.

In an overloaded curriculum there might, at first, appear little chance of adding further to the burden of the medical student, yet the knowledge, so acquired, is now so fundamental and allied with the practice of medicine and surgery, both in hospital and private practice, that the dangers of neglecting the study of this new aid are perhaps as great as the failure to make use of it.

How then can the medical student be given the opportunity of becoming conversant with the radiographs brought to him by his patients, interpret others when no other help is available, and learn the uses of radiology and the pitfalls of radiological interpretation?

Not 25 years ago it was probable that the average medical student completed his studies without seeing many X-Ray photographs. Today, the majority of out-patients and nearly all in-patients have some investigation carried out by X-Rays.

The study of radiographs might easily commence in the students first year, when an X-Ray of the dogfish, frog and rabbit and certain botanical specimens could be taken and studied. At this period the method of production of X-Rays could be described and demonstrated in the Physics Department.

In the second year a big field is open in anatomy and physiology for the study of the normal, and has been developed considerably in the modern manuals of Anatomy and Physiology.

In addition to the skeleton, each student could be provided with a series of radiographs of the normal, including all the organs routinely examined by X-Rays, with and without contrast media. Some organs in the body are particularly adapted to anatomical and physiological study by radiography.

It is important to decide the form in

which the radiographs are presented. In the Department of Anatomy where space is sufficient to provide viewing accommodation for full sized negatives, these could be permanently displayed, the negatives being preserved by a cover of plain glass. An alternative would be framed and mounted negative full size prints, which would obviate the provision of viewing boxes, and preserve the shadows of the negatives in their original form.

For the physiological demonstration of the normal by fluoroscopy, not more than two students at a time could view satisfactorily, and it is debatable whether such demonstrations should not be given preferably in the X-Ray Department, thus avoiding duplication of apparatus and the dangers of over exposure to Rays.

The student now commences his clinical studies with some knowledge of the parts of the body that can be usefully examined by X-Rays, and of the normal appearances. With the limited time now at his disposal, only methods are considered which do not interfere with his normal studies.

Students would be encouraged to bring films of their patients for demonstration in the viewing room and to follow their own ward cases into the X-Ray Department to see them examined, especially when a fluoroscopic examination is to be made.

The study of radiographs in conjunction with post-mortem forms an important field, and could be supplemented by radiographs of the removed organs prior to section, in order to demonstrate the exact relationship between the radiographic and post-mortem findings.

The limitations of radiological methods must continue to be studied in close collaboration with the clinical findings and are best studied by the student in conjunction with his clinical teacher who will be able to advise him of the significance of a negative finding or of the unexpected radiological findings whch are unaccompanied by signs or symptoms.

An exhibit of the radiological contribution to diagnosis in each of the special departments would form an important help to the student where he could study under the expert guidance of the Physician or Surgeon in charge of the Department, including the uses of radiology in urology and midwifery and gynæcology.

But in addition, there is great need for an X-Ray Museum where students might study typical abnormal radiographs in conjunction with the pathological specimen and the clinical findings, and many conditions may be well illustrated by radiographs in which no pathological specimen is available.

It is here that a difficulty arises in the method of presentation of such an exhibit, for the filing of the original negatives for this purpose has proved impracticable.

There seems no doubt that it is desirable to reproduce the radiographs in their original negative form and that they should be viewed through transmitted light, but for economical reasons a reduction in size would seem to be inevitable.

In practice a reduction to half plate size produces a highly satisfactory result in many conditions, and those which do not show so readily can be reproduced by a contact film of similar size.

Films of this size can be conveniently viewed when mounted in frames of nine, and would be suitable for study by individual students at their own convenience, or for lecture demonstrations.

Such frames could be filed in racks in a regional or pathological sequence, so that the number of students able to view them would depend only on the viewing space available.

The half plate size of reproduction would be found suitable to display the printed history, physical signs, pathological findings and radiographic interpretation, the photograph of the patient or affected area, the radiographs, the diagramatic representation of gastroscopic, bronchoscopic findings, temperature chart or test meal curves, etc., the photograph of the gross pathological specimen and the photomicrograph of its section.

It is probable that many of these suggestions have already been put into operation, others may be found to be impracticable to adopt at the present time.

Radiology has, however, an increasingly important part to play in the study of living pathology, and will be found to be an ideal subject for training the powers of perception.

All contributions for the April edition should reach the Journal by March the 12th.

THE PLACE OF ORGANISED "ELBOW LIFTING" IN TREATMENT OF THE FRACTURED HUMERUS

This case is presented to illustrate the manner in which some principles of fracture treatment and rehabilitation of an injured limb may be carried out in everyday life without recourse to special apparatus: such principles as (1) early active movement of the muscles in the region of the fracture, (2) every possible encouragement of the "will to move" at an early stage in spite of pain, and (3) the provision of the most pleasing circumstances under which the patient can carry out his movements.

History of Present Condition

On Christmas Day the Officers had entertained the Sergeants before lunch, and the airmen at lunch. There had been no lunch for the Officers. After lunch the Officers had been entertained by the Sergeants.

At about 16.30 hours, Squadron Leader R— left the Sergeants' Mess and attempted to mount his bicycle. Either on account of the fog or the icy state of the roads or some other factor, Squadron Leader R— missed the bicycle and fell strongly on the road on his left shoulder, narrowly avoiding being run over by the Medical Officer who had left the Mess in his car just behind him.

Past History, Habits of Patient, etc.

The patient had always liked his glass of beer.

On Examination

General condition good. Pulse rate high.

Left shoulder: Pain and tenderness and swelling over the upper end of the humerus. Almost complete loss of all active movements at the shoulder, notably adduction.

X-Ray showed (1) Crack fracture of the surgical neck of the humerus; (2) complete detachment of the greater tuberosity.

Treatment

For three days the arm was kept in a collar-and-cuff sling under the clothes. During that time attempts to contract actively the deltoid muscle without moving the arm were encouraged.

On the fourth day the patient was immersed in the largest and broadest hot bath Station Sick Quarters could provide. Under water movements at the injured shoulder in all directions — particularly outwards — were started, together with full movements at the elbow. This performance was carried out for half an hour, once on the first day, twice on the second day and three times on the fourth day. Squadron Leader R— enjoyed it immensely as the difficulties in normally getting a bath at E—, which is a widely dispersed and exquisitely uncomfortable camp, are enormous.

On the seventh day the patient was allowed to wear his slung arm outside his clothes. He was made to dress and undress with the minimum of assistance. This he found not so good in the mornings, though easier at the end of the day.

On the ninth day a rule was brought in by which the patient was forbidden to drink any beverage with his uninjured arm. This involved frequent and purposeful lifting of the elbow on the injured side. Times of treatment corresponded approximately with opening times of the bar. Half pints only were allowed to be used at first.

Under the constant encouragement of many friends (including the Medical Officer who exercised supervision), and under the pleasantly mellowing and possibly mildly anæsthetic effect of what was drunk, Squadron Leader R— succeeded in lifting his elbow to the level of the shoulder by the eleventh day. From then onwards, the weight was increased, pint tankards being substituted for half pints. Throughout the treatment constant assurance was given that early treatment of this nature would bring about the removal of all pain in an astonishingly short time. All support was taken away at the end of a fortnight and the patient returned to full ground duties.

Function and power were full and all movements painless at the end of three weeks. Check X-ray showed union and good position of the fracture.

Summary

A case is described of fractured greater tuberosity and surgical neck of the humerus in an R.A.F. officer. Emphasis is laid on the importance of instituting full early activity of the injured part under ideal conditions of treatment. These are claimed to be produced in an R.A.F. mess by improvisation. No use was made of a hospital or massage department except for purposes of X-ray. The time of recovery and working hours lost are considered to be minimal.

R. S. H.

ON BEHALF OF THE ILLITERATE

On the heels of the order closing University arts faculties came the mild plea from the British Association (Interim Report, 13/12/42) that:

"Students, particularly scientists, who so specialise in their studies that they have no knowledge of world affairs or home government, should be obliged to attend classes in subjects outside their ordinary studies."

This is an old one on us. We have been hearing pleas of this sort, at one time or another, ever since the dogfish lost its mystery to our youthful fingers.

Of course, all will agree that the newly-qualified doctor is—apart from a comprehensive knowledge of Medicine, Surgery, Midwifery and Gynecology, Pathology and such things, with a goodish smattering of Anatomy, Physiology and Histology, and even some Embryology, not to mention Biochemistry and a few fragrant memories of Physics and Botany—he is, all will agree, apart from this, a fearfully ignorant fellow. He knows nothing at all about art, and stuff like that. To rectify this terrible state of affairs, there should be included in the medical curriculum an obligatory subject like English Literature, or Painting, or Music, which could be studied over week-ends, say, and included in half the finals exams.

Everyone can spot the advantage of this at once. The doctor could stroll into the sick-room remarking "Fine copy of a Van Gogh you have there—where d'you pick it up?" or recite Hamlet from the foot of the bed, or play the flute to his patient—all this for a few more hours work a week.

But we hold and will maintain that the Medical Education supplied in this country at the moment is not merely a training for the future Medical Practitioner. It is an extensive and all-embracing business and includes a thorough instruction in the Classics and Arts. For the benefit of those without the advantages of a medical education, we append a syllabus:—

CLASSICS. A working knowledge of Greek and Latin is readily obtained after a year or so at Anatomy and Pathology. A thorough groundwork of the grammar comes first, and even in his first term the student starts referring to femurs as femora and thoraxes as thoraces, and later on would never dream of talking about a couple of mesonephroses except as mesonephroi.

His vocabulary grows rapidly until he begins to form small sentences like Extensor digitorum communis, Appendices epiploccae, et Flexor carpi radialis longus. Ah! What flavour of a lovely language is this! No classical scholar could stand up to the medical student in impressiveness of pronunciation, either. We delight to recall the old naval surgeon who was asked to say grace at a family dinner. Refusing to be foxed on this score, the old boy rose and solemnly intoned "Levator Labii Superiores Alequae Nasi." The company muttered a reverent "Amen" and got on with the eating, happy.

I admit we are a little hazy as to which is the Latin and which is the Greek, but what are mere technicalities? We often know the meaning of the words, too. We will exclude the young fellow from Cambridge who was asked in a lecture what Pudendæ meant. He thought hard a moment and replied with shining self-assurance, "Love, sir."

ART. We get to know a lot about drawing from the start. During the Botany course we spent one whole afternoon drawing a potato. Since then we have produced passable likenesses of such fascinating subjects as pig embryos, the Crypts of Lieberkuhn and the Ano-rectal junction.

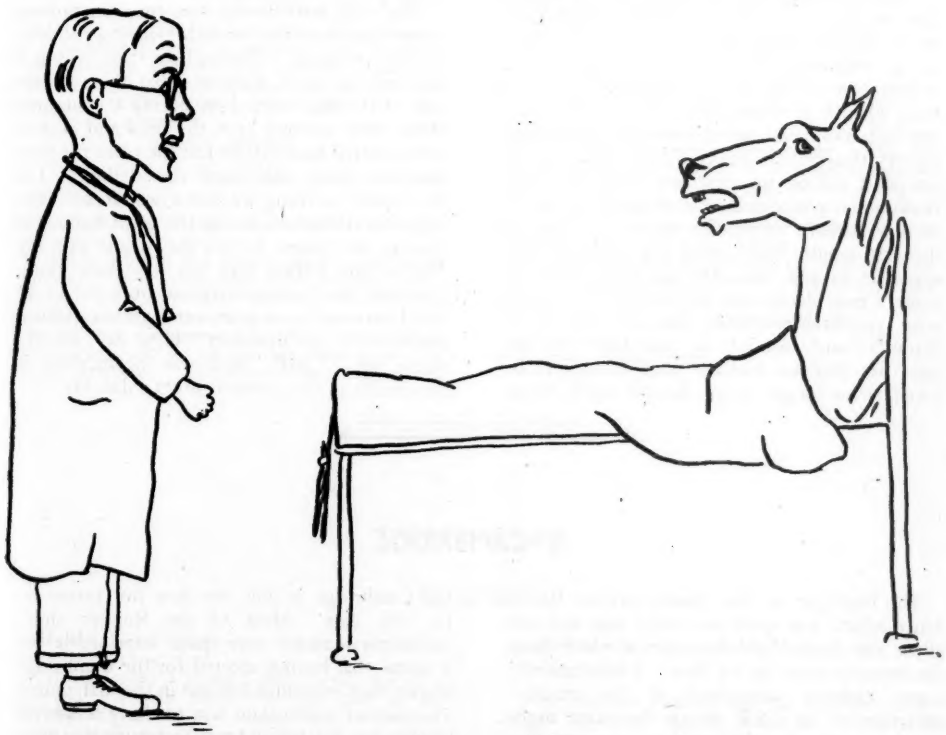
Colour values we picked up easily in Biochemistry. We soon learnt to compare the different shades of Methyl Orange, Brom Thymol Blue and Chlorphenol Red to three places of decimals on a burette—a mathematical exactitude far beyond the powers of the ordinary painter.

MUSIC. The medical student receives a thorough, though limited, instruction in music. His *forte* is the tuning fork and the stethescope, with early variations on the Kundts Tube. Who can deny the music in the soul of those writers of Clinical textbooks who mention whimsically "The sound of distant church bells?" And who includes in their repertoire such titles as the "Bruit de Gallop" and the "Bruit de Rappel" which stir the imagination and bring to the mind's ear the stout notes of the "Post-Horn Gallop?"

A fine musical sense is quickly acquired by the student, and he is soon able to come out with early variations on the Kundt's Tube. Who think that's a medium non-resonant moistish râle" and talks as glibly of sibilant and sonorous rhonchi as a Queen's Hall critic on movements, tones and phrasing.

LITERATURE. Here, we must admit, the critics have us by the ears. So much technical stuff has to be swallowed by the student that he hardly has time to read any of the classics, such as "No Orchids for Miss Blandish" and the works of Mr. Damon Runyon. Shakespeare, Milton, Dickens and such birds are unknown properties to the Medical Profession, say the arty boys. In fact, one day they will all stand up and shout aloud that doctors are a coarse, unimaginative crowd, incapable of human sentiments and logical human expression, and be promptly trampled to death by a great horde including Dr. Somerset Maugham, Dr. Harold Dearden, Dr. Francis Brett Young, Dr. A. J. Cronin and Dr. James Bridie, led by the revered shade of Dr. Conan Doyle.

ALAN TOIS.



"I'M A LITTLE HOARSE TODAY, DOCTOR"

At HILL END

Life at Hill End goes in waves of activity rising slowly to a peak with a play, a choral concert and a dance, all inside a week. The crest of the last wave was at Christmas and the descent would have given a tracing rather like that or the Radial Pulse. The intense activity of Christmas gave way to a calm week with most of the students away from the hospital, and then suddenly about the New Year everything sprang back to life again giving the Dicrotic

notch, and then after the dance everything faded out and nothing happened here worthy of note. This period of sleep lasted about a month and now at the beginning of February life is just returning. After a somewhat stormy outset the Dramatic Society has launched a new play; "Busman's Honeymoon." The Choral Society have also begun rehearsals; this term they are doing a selection from Handel's "Messiah"; although it is a little early to judge but from what I have heard at practices this is going to be a great success.

There are many theories attempting to explain this oscillation on the activities at Hill End; so far the only reasonable one that I have heard is as follows. The period of quiet, and apparent inactivity at the beginning of each term when it is reasonable to presume that having just completed one appointment with some regrets, that perhaps you could have done better, you start out on the new one with reaffirmed resolutions; you also have a reasonable number of new patients to practice them on. Then as the first month wears on it gradually becomes apparent to you that after all your efforts to make a finer doctor out of yourself it is as last term, you have only been allotted a set of old chronics; and certainly by that time the one rare case that you had the good fortune to be given is no longer rare. So the wards begin to lose their attraction or more accurately the work in the wards loses its novelty and you look around for something to occupy your time. There are usually some nurses knocking around and they have been looking after these patients for months, how boring for them you feel, so you fall into conversation, and then you fall into a drink at the Plough one evening; shortly there is a dance, and so it goes on, the wave is rising. If by the end of the appointment you have fallen no further then you may consider yourself a lucky man.

The only activity that has gone on uninterrupted has been the Scottish Dancing on Wednesday evenings. Throughout the season it has been so great a success that there is now talk of it being carried on during the summer. What with summer heat, the food and Scottish dancing Hill End will be just the place for those bodyline cases who need remodelling. Last Wednesday evening we had a wonderful evening, Mrs. Patterson did us the great honour of playing the piano for us the whole evening. This is the second time she has come along, this time the dancing went on from 9—11.30. On Thursday the only answer I got on greeting people with the customary "How ya" was the single word "Stiff," such was the measure of the success of the previous night's dancing.

At CAMBRIDGE

The highlight of this month was the Bart.'s dance which was quite successful and was one of the few dances held nowadays at which there was room to move on the floor. Unfortunately, many students succumbed to the counter-attraction of an L.S.E. dance the same night which boasted what the jive-fans assure me was a "hep" band. Our dance was, if not "heppy," very happy and we look forward to more of them.

On a recent Sunday the Home Guard carried out a military exercise which began at the unholy hour of seven in the morning. Most of the suckers who went got up before six and one early morning wit was heard to remark that he hadn't been up that early since the last time he was up that late.

The Hockey Club report successful activities and, having already beaten the strongest side in the Cambridge league, are now hot favourites for the cup. Most of the Rugger club's secretary's remarks were quite unprintable but it seems that having entered for the Cambridge league, they were knocked out in the first round. The lack of enthusiasm was reaching unknown heights (or depths) and was so terrific that they played their first league match with a full team less those grand fellows who couldn't be *bothered* to turn up.

Ever wishful for publicity the boat club have at last achieved immortal fame by having an almost head-on collision with a Cambridge University eight. The Cam is apparently the Cambridge University river and so this effort cost the boat club a guinea. Further than that the secretary says that they hope to enter two eights for the Lent races and that he joins with the Rugger secretary in asking for a little more enthusiasm and interest in the club.

CORRESPONDENCE

To the Editor, St. Bartholomew's Hospital Journal

Dear Sir,

I was very glad to see that the JOURNAL has ceased to be a war edition. May I draw attention to a small mistake in your editorial. You say that "at the beginning of the war the JOURNAL felt that it could not continue in its old form and it was only because of the earnest wishes of various authorities in the Hospital that a JOURNAL was produced at all." This is not quite correct, for at the first meeting of the Council of the Students' Union, held at Mill Hill early in September, it was decided that the JOURNAL, which is the property of the Students' Union, must be produced. The Editor was told that he must see his Editorial Committee about producing a JOURNAL as soon as possible. The Students' Union advanced £100 to tide over the immediate difficulties in the way of finance, and this sum has been loaned to the JOURNAL indefinitely.

I remain,

Yours sincerely,

GEORGE GRAHAM,

Ex-President Students' Union.

February 4th.

To the Editor, St. Bartholomew's Hospital Journal

Dear Sir,

I wonder whether any of your readers (including "Anthony," your correspondent of January, 1943) can supply me with some information. We have 373 clinical students, of this large body there are only about 40 who are prepared to play rugby—hockey takes another 25, so we are left with some 300 inactive students. Referring once again to "Anthony," so far as we are concerned a man may be a total abstainer and of any race or creed and still play rugby for the hospital. We are prepared to welcome either or both. The questions I should like answered are:

(1) Why the falling off in players.? Pre-war we ran six or more teams.

(2) What do the other 300 students do on Saturdays—not work I'm sure?

I await any information that may be forthcoming.

I am, yours sincerely,

J. H. GIBSON,

Hon. Sec., R.O.F.C.

St. Bartholomew's Hospital, E.C.1.

January 28th, 1943.

To the Editor, St. Bartholomew's Hospital Journal

LOOK BEFORE YOU LEAP

Yes, it has happened, and several times. A lifelong technique of carrying the necessary in the hip pocket has lapsed too often. It is not that there is any serious objection to the advertisement sheets of the medical journals, so thoughtfully provided; but the difficulties are greatly increased when the empty cardboard carton is the sole supply.

The crisis came when the choice lay between petrol coupons and airgraph letters. You have been warned!

Yours faithfully,

B.W.O.

606, Lower Harley Street.

January, 1943.

SPORTS NEWS

RUGGER

v. Public School Wanderers. Home, January 30th, 1943. Won 15—0.

This was rather a scrappy game, partly due to a high and very cold wind. We did most of the attacking and should have scored more; at least 4 scoring passes were dropped. Our first score came when an opponent passed very neatly to Corbett, who walked over unmolested. The next score was again lucky, Juckes and Gibson endeavoured to do a scissors, which failed—Davey received the ball and ran some 40 yards to score under the posts, Hawkes converting. In the second half, playing with the wind, we attacked more strongly, and from the kick-off Wood and Anderson produced a long dribble, and the latter scored a try. From then on the forwards broke every rule in the book and had some eight free kicks given against them. The opposition never really looked like scoring, and just on time Hawkes dropped a goal.

Team.—Austin; Davey, Juckes, Gibson, Jones; Hawkes, Stephen; Wood, Mann, Marcroft, Hall, Anderson, Stephens, Corbett, Wigglesworth.

v. Oxford University. Away, February 6th. Lost 24—12.

The somewhat depleted state of the side doesn't excuse the sleepy way in which we started, as a result we were 8 points down before we awoke. Then we had several good moves, mostly by Juckes and Pitman, but though they appeared to have scored on two occasions yet something went wrong each time. We crossed over 11 points down. We started the second half with the proverbial "bang," and collected a try and a penalty before letting them have two more tries. In another bust Pitman scored from a kick ahead by Hawkes, which brought us within 4 points of them before the creeping lethargy got us, and they scored twice more, our only reply being a penalty by Hawkes. They were certainly faster and fitter than us, but nevertheless a disappointing game.

Team.—Gibson; Davey, Juckes, Pitman, Jones; Hawkes, Todd; Wood, Mann, Jones, Anderson, Moore, Corbett, Wigglesworth, Thomson.

v. Wasps. Away. January 16th. Lost 3—13.

After our experiences of the previous week on the frozen ground at Richmond, the Wasps' ground came as a complete contrast, as it appeared to have been recently ploughed and was inches deep in very wet mud, which made running difficult and turning virtually impossible. As usual their pack were very heavy and apparently equipped with web feet. Stephen's absence from scrum half was made worse when he had to go off after 20 minutes; however, Corbett, making a first appearance in this position, enlivened the game both by his language and extremely unorthodox method of passing out.

The Wasps had the ball nearly all the game, and as a result we spent most of the time defending fairly successfully, their tries being due to the weight of their pack. On one occasion they pushed us over our line. In the latter stages the game became more like soccer played with a 12-pound shot. However, in the last few minutes the outsides with a sudden burst of enthusiasm produced a really good movement, and Juckes scored a try, which he had started on our 25 yards line.

Team.—Austin; Davey, Juckes, Gibson, Jones; Hawkes, Capon; Wood, Mann, Alcock, Hall, Anderson, Stephens, Marcroft, Corbett.

v. St. Mary's. Away. January 23rd. Lost 11—0.

This was really a very good game, fast and open. We were certainly outplayed behind the scrum and did well to hold them, Kemp and his sidestep being as troublesome as ever. Lack of finish prevented us scoring on at least two occasions, while Hawkes was unlucky not to get 4 points for a very good shot at a drop.

Team.—Austin; Davey, Juckes, Gibson, Jones; Hawkes, Stephen; Wood, Mann, Alcock, Hall, Anderson, Stephens, Corbett, Wigglesworth.

At HILL END

Again this term the Rugger Club has done exceedingly well. Out of four matches played three were won. A keen interest has been shown in the activities of the side; and we were never at a loss for a player. Admittedly, sometimes a forward found himself in the unfamiliar position of three-quarter, but in spite of this the play has not suffered too badly.

A very full fixture list has been arranged, and, with our present team we are looking forward to maintaining last term's good record.

Our best game was against the "Pre-Clinicals," played at Cambridge on February 3rd, which we won 9 pts.—0 pts.

In the first half, playing with the wind, and with Mathew heeling well, the backs had many opportunities to show their speed and thrust. As a result, the Cambridge line was crossed three times; each after good passing and strong running. The scorers were Juckes (1) and McMillan (2).

In the second half, Cambridge made full use of the wind, and Hawkes used the touch-line to full advantage. However, the defence held and gradually we returned to the attack; coming near to scoring on numerous occasions.

The Cambridge forwards, in the second half, heeled from most of the scrums and were extremely lively in the loose.

Altogether, a very good and pleasant game.

Team.—R. N. Austin; J. McMillan, R. G. Pitman, W. Juckes, J. C. Seymour; T. P. Kelly, P. Taylor; K. Bulmer, G. G. Mathew, Dingley, A. Rimmington, G. Thomson, A. T. Glanvill, E. W. Hughes, A. Jones.

ASSOCIATION FOOTBALL

v. R.A.F. (I.T.W.) (Pembroke and Trinity Hall). Saturday, January 16th. Won 5—2.

Back from a short Christmas vac., we initiated our first success of the second half of the season by comfortably beating an R.A.F. I.T.W. team.

After having had five men of the team injured at one juncture of last term, we thought we were immune from any more, but this proved to be false, for Goodrich was forced to spend most of the game watching from the side.

The Air Force were the first to score with a ground shot from the edge of the penalty area, but it was not long before Mangan shot a pass from McCluskey into the corner of the net. The R.A.F. then went ahead again, but Whiteley equalled the scores shortly before half-time. During the second 45 minutes, we had most of the play as we liked, Blackman and McCluskey getting three goals between them.

Our success was due mainly to our strong half-back line, Xavier, Murley and Mangan, who alone are responsible for the combining of the forwards with the defence.

Team.—Pinc; Griffiths, Jordan; Xavier, Murley, Mangan (capt.); Thomas, Blackman, Goodrich, McCluskey, Whiteley.

v. R.A.F. (I.T.W.) (Downing and Pembroke). Wednesday, January 20th. Lost 6—2.

This match proved to be one of the best we have had this season. Although we were beaten, the defeat was well worth while for its educational value. The R.A.F. were the first to score when three of our men had not yet reached the ground.

When they arrived we settled down much better, but the lively open game as played by the R.A.F. proved too much for our overworked defence, and they soon had the ball in our net again. It was the swinging of the ball to such an extent that was the decisive factor behind our defeat.

However, they did not have it all their own way, for ten minutes later Mangan pushed the ball past the goalkeeper after a scrimmage inside the penalty area. It wasn't long after this that Mangan again scored by heading a punch by the goalkeeper.

The R.A.F. were again in the lead before half-time, and in the first part of the second half we had really bad luck. It would be no exaggeration to say that Mangan and Blackman between them hit the cross-bar on at least eight occasions, and even Whiteley's hard low shots from the wing were of no avail.

Under the strain of taming the fastest forward line we have yet come across, Murley and his men in defence found the going a little too tough, and towards the end the R.A.F. raised their score to six.

One of these goals was due to the fact that Pine did not seem to be on his usual good form in goal.

Team.—Pine; Griffiths, Jordan; Xavier, Murley, Watson; Thomas, Blackman, Mangan, McCluskey, Whiteley.

v. London School of Economics. Saturday, January 23rd. Won 11—0.

With Burns on a 'Varsity call and Goodrich absent ill, our eleven defeated L.S.E. in a League match by the decisive margin of 11—0. L.S.E. fielded only 10 men, due to the absence of two of their men also on the 'Varsity call.

However, they put up a courageous struggle against a determined side whose superior combination and technique, coupled with a goal consciousness as yet unknown to our eleven, turned an ordinary win into an overwhelming defeat.

Our team are to be congratulated on (1) the lack of individual effort and prevalence of combined effort; (2) their superiority in the air which helped so much in giving us complete run of the play; and (3) the spirit which enabled them at half-time, when the score was 5—0, to carry on and add another 6 goals before the final whistle was blown. This kind of initiative has hitherto been lacking, and on numerous occasions we have not made full use of our advantages.

Incidentally, since a delay in starting gave us only 35 minutes each way, we averaged one goal every 6½ minutes.

Team.—Pine; Griffiths, Jordan; Thomas, Murley, Mangan; Gai, Xavier, Blackman, McCluskey, Whiteley.

HOCKEY CLUB

v. St. Mary's Hospital, Saturday, February 6th. Won 2—1.

We were playing at Teddington on one of the best days of the season. The opposing forwards started with a rush, but were interrupted by our backs; there was a lot of loose play, and we had a close and difficult time in our circle, ended by a brilliant save by R. H. Ellis, and a short corner. They failed to make anything of the corner and our forwards managed to get away, and P. C. Mark scored.

After half-time we were caught on the wrong foot, making the score even. Most of the play was then in their half, and several shots at goal were narrowly missed. One of their backs was hit on the face in a melée in their circle and had to retire. We had a few anxious moments when their forwards got away once, but P. C. Mark scored again a few minutes before the end from a flying pass from H. M. Giles.

ANNOUNCEMENTS

BIRTHS

HARFORD REES.—On December 27th, 1942, to Joan (née Marchant), wife of Lieut. E. Harford Rees, R.A.M.C., India—a daughter (Jacqueline Patricia).

KENNEDY.—On January 27th, 1943, at St. Bartholomew's Hospital, E.C.1, to Gillian Barbara Kennedy (née Norris), widow of Surgeon-Lieutenant Alastair Baird Kennedy, R.N.V.R. (killed in action, H.M.S. "Algerine," November 15th, 1942), the consolation of a daughter (Alison Baird).

WARD.—On 1st January, 1943, at St. Bartholomew's Hospital, E.C.1, to Elizabeth (née Brett), wife of Lieut. A. Ian Ward, R.A.M.C. (India)—a daughter.

MARRIAGES

COOPER—BELL.—On November 19th, 1942, at St. Ethelberga's Church, London, John Richard, son of Mr. G. Cooper, Esher, to Frieda, daughter of Mr. and Mrs. F. Bell, Darlington.

* * * *

Lieut.-Colonel M. R. Sinclair is a prisoner of war in Campo Concentramento, P.G.N.6., P.M. 3400, Italy, and would welcome any correspondence.

THE CONJOINT BOARD

PATHOLOGY

Entage, G. S.
Moffat, J. R.
Curé, S. M. F.
Syed, I. H.
Green, B.
Egerton, B. H.
Webb, B. J.
Amin, I. B.
Helme, P. E.
Evans, J. W.
Rémy, M. F.
West, J. A. T.
Brenman, E.
Thomson, W. G.
Rey, J. H.
Street, D. F.
Reichenheim, P. P.
Stammers, F. M. G.
Napier, J. R.
Gray, A. J.
Porter, J. M.
Bibbings, G. E. R.
Conway, M.
Rowntree, P.
Morris, J. D.
Weinreb, H.
Lambert, C. L. S.
Mathes, C. J.

MEDICINE

Boroda, C.
Honig, J. L.
Payne, J. C. R.
Helme, P. E.
Irving, J. K.
Brenman, E.
Amin, I. B.
Napier, J. R.
Davies, T. M.
Watkinson, G.
Roxburgh, I. A.
Nicholson, R. D.
Frampton, H. G.
Mortimer, K. E.
Allcock, J. M.
West, J. A. T.
Sullivan, B.
Philpott, M. G.
Loosemore, T. G. E.
MacKenzie, W.
Gray, A. J.
Goldstein, H.
Taylor, H. N.
Ramsay, G. S.
Demetrius, L. F.
Campion, C.
L'Etang, H. J. C. J.
Evans, T. G.
Moffat, J. R.
Arango, R. E.
Taylor, G. W.
Nash, F. A.

SURGERY

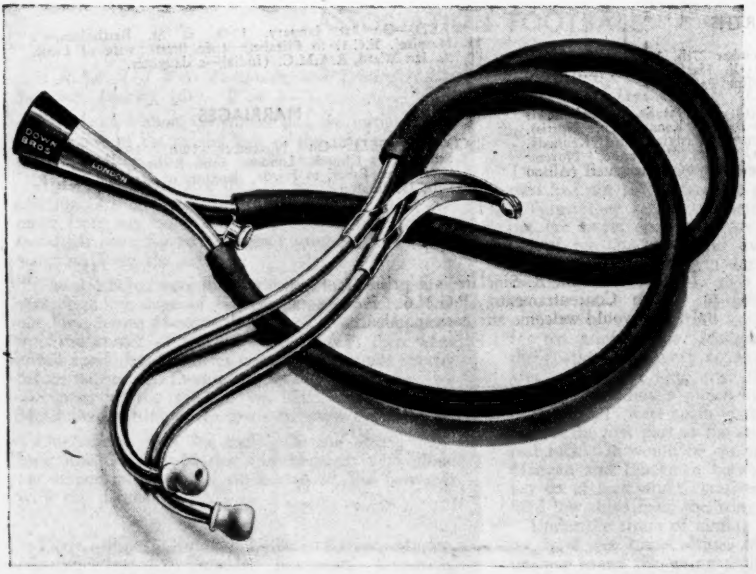
Bromfield, F. B.
Reichenheim, P. P.
Mann, P. G.
Thomas, M. V. P.
MacPhail, R. M.
Burkitt, E. A.
Johnston, E. N. M.
Eley, A. J.
Cotton, T. C.
Gupta, H. C.
Randall, K. J.
Laidlaw, C. D'A.
Leven, M.
Shaw, R. E.
Ernest, M.
Pragnell, C. A.
Vincent, H. R.
Jones, J. N. H.
Calderwood, R. W. L.
Jones, P. F.
Freeman, A. G.
Perfect, A. J. S.
Rowntree, P.
Oliver, J. E.
Morse, F. G.
Hunt, M. R.

MIDWIFERY

Emtage, G. S.
Boyce, R. M.
Thomson, W. G.
Anderson, A. R.
Watkins, P. F. A.
Goolden, A. W. G.
Finlayson, V. O.
Irving, J. K.
Drake, G. H. P.
Freeman, A. G.
Syed, I. H.
Farrar, D. A. T.
Whitfield, D.
Gupta, H. C.
Amin, I. B.
Davies, W.
Goodall-Copestake, G.
Eley, A. J.
Jones, P. F.
Hemming, M.
Rey, J. H.
Lister, J.
Moffat, D. B.
Calderwood, R. W. L.
Allcock, J. M.
Burkitt, E. A.
Mann, P. G.
Potter, J. M.
Morris, J. D.
Townsend, W. H.
Gabril, Y. Y.

Diplomas were conferred on the following:—

Napier, J. R.
Gray, A. J.
Lambert, C. L. S.
Watkinson, G.
Ramsay, G. S.
Goldstein, H.
Boróda, C.
Bromfield, F. B.
West, J. A. T.
Brenman, E.
Mathes, C. J.
Taylor, G. W.
Philpott, M. G.
Loosemore, T. G. E.
Mortimer, K. E.
Eley, A. J.
Moffat, J. R.
Weinreb, H.
Allcock, J. M.
Sullivan, B.
Nicholson, R. D.
Frampton, H. G.
L'Etang, H. J. C. J.
Thomas, M. V. P.
Helme, P. E.
Rowntree, P.
Evans, T. G.
Roxburgh, I. A.
Demetrius, L. F.
Campion, C.
Honig, J. L.



Surgical Instruments and Hospital Furniture

DOWN BROS., LTD. *Correspondence:* 23, Park Hill Rise, Croydon. *Showrooms:* 22a, Cavendish Square, W. 1